
Life way of the New Jersey Institute of Technology student

Science has always been an interesting subject for me since childhood. I was in grade 9 when web development was introduced as a core computer course in secondary state board. The course included basic web development languages such as HTML, CSS and a bit of JavaScript. Soon after learning a bit of coding in HTML, an interest provoked in computer-related courses. At the end of my semester, I was able to develop a small static website based on HTML and CSS. For higher secondary courses, different institutes provided different vocational courses. Students had the provision for opting vocational subjects instead of a subject such as Biology. I decided to go for computer science as a vocational subject instead of Biology and Hindi. I learned some basics of programming language C++ such as data-types, functions, pointers and references, and an overview of OOPM. This was the first time when I actually understood problem definitions and solved some ordinary mathematical problems through coding. Coding was now an integral part of my life. By the end of my secondary higher education, I was certain enough about my undergraduate courses. I decided to pursue a bachelor's degree in computer science engineering.

The 4-year engineering course was not just a study on concepts and theories that I went through, but a series of practical applications in terms of mini projects. Every semester had challenging new subjects that included some practical implementation as well in the laboratory. In the 3rd year of engineering, I worked on an online auction web development project. I particularly invested my time in parts such as web form validation using jquery, database operation using MySQL and PHP. In the next semester, my project team was inclined to work on some new domain. Android development seemed quite intriguing. At that moment, me and my team decided to develop an android food application. The app comprised of basic functionalities such as viewing recipes and watching relevant videos. I worked primarily on API's as it served a primitive source of data in the application.

The final year of the 4-year degree course proved to be a turning point in my life when I came across a new domain of Artificial Intelligence. This domain covered a wide range of subjects such as machine learning, Data Science etc. The subject machine learning covered a plethora of algorithms for identifying patterns for data analysis. This subject arose a keen sense of interest in me to implement a project based on this algorithm. With the approval of the respective project guide and the head of the department, I was assigned to develop a project using machine learning algorithm called the "Naive Bayes" algorithm. The project was a "News classification system" that classified articles given by the users as «news», «sports», «gadgets» and «education» labels. The system comprised of a crawler for scraping data to define a dataset for the algorithm. About 80% of the crawled data served as a dataset for the algorithm to learn, whereas the remaining 20% of the data was used for testing the model. Scikit-learn library was then used for implementing "Naive Bayes" model for training the data. The initial accuracy of the model was 0.62. However, the accuracy of the model ameliorated each time when the model misclassified any article, since the correct label for the respective article was taken as an input from the user and appended to the dataset. This strategy not only assisted in improving the accuracy but also helped in expanding the dataset. The accomplishment of this project fomented enthusiasm in me to explore the subject into more detail than I anticipated. Pursuing a master's degree in this domain then suggested as the best choice for chasing my passion

towards the domain. Other than Academics, I have also been involved in the college's cultural activities, I was the Co-Head of the Creative Committee during the college's cultural fest known as Milestone 2018.

Completing a bachelor's degree in computer science gave me an overview and basic understanding of all the possible domains and concepts. However, the knowledge that I acquired isn't sufficient enough to solve any real-world problems. Also to work as a domain-specific employee in a company, more detailed knowledge about the concepts is significant apart from having a good work experience. A master's degree in computer science will not only proliferate my knowledge but also with the internships included in the academic schedule will provide me a good exposure with the company.

With the degree, the knowledge, as well as the work experience that I gain through the 2-year courses, would not only serve me an opportunity to work as a software developer in product based companies, but will also make me technically sound to handle real-world projects. After the 2-year MS course in computer science, I wish to work in companies like Google, Facebook or Qubit as a software developer for AI or ML. Working in these top companies will give me adequate exposure to different software projects under consideration, different ideas from different software engineers working in the same domain. After working in these companies, I feel my vision towards work will entirely change as I gain enough power and confidence to easily work in any company. Then Securing a job in Multinational companies after returning to my home country will be no big deal.

The New Jersey Institute of Technology is a widely popular university that offers a variety of postgraduate courses. It has a good ranking at the national level institutes which is an essential aspect to be considered while selecting a university. The Ying Wu College of Computing within this institute provides a wide range of elective courses for MS in computer science that satisfies my criteria such as image processing and pattern recognition, data mining etc. Moreover, it has outstanding faculty, who not only assists students in learning the concepts better but also help them with their project. Being an international student, I would get an experience in learning from one of the best colleges with state of the art Laboratories would prove a requisite in the growth of my knowledge.

An Admit from The New Jersey Institute of Technology will encourage me to fulfill my passions not only with the knowledge that I gain through the courses but also through the projects that I build.